

FREIGHT ON THE RANGE

**IN AGRICULTURAL CITIES OF THE FUTURE,
BISON ROAM THE INDUSTRIAL PLAIN.**

BY JEFF LINK

A 100-year proposal for transforming the ecology and economy of northeastern Illinois reveals an entirely new way of conceptualizing the American metropolis. Instead of the glass skyscrapers, rebar-bonded bridges, and pigeon-roosting subway platforms of the modern city, *Logistical Ecologies* presents an intricately designed freight and agriculture hub where bison graze grassy hills, corn and soybeans are sowed and shipped to Asian markets, and farmers and rail workers live side by side in new prairie settlements.



The landscape designer behind the proposal is Conor O'Shea, Associate ASLA, the founder and principal at Hinterlands Urbanism and Landscape, a research and design firm based in Chicago. His plan, recently exhibited at the Chicago Architecture Biennial, hinges on the Bison Mosaic, a system of land use rotation that cycles between tallgrass prairie and cropland. Over several decades, bison grazing—assisted by prescribed prairie burning—would enrich the soil so that crops can be planted without the need for harmful phosphorus and nitrogen.



Returning bison to northern Illinois, where they once roamed wild, is not an original idea, though it is a relatively new one (see "The Bison Begin Again," *LAM*, November). Where O'Shea's plan distinguishes itself is in the way it places bison at the center of a new urban-agrarian economy, informed by multiscale GIS visualizations. "Bison don't become a link just to native prairie grasses,

forbs, and field mice," O'Shea says. They "set up the conditions for renewed agricultural practices, and, in turn, help forge a relationship between agriculture, containerized goods, and the railroad."

Already, a robust, urbanized system of double-stack railways and distribution warehouses is flourishing some 40 miles outside Chicago, thanks in

ABOVE

The logistics hub meets grazed prairie near the Mississippi River, allowing for shipping by boat and truck.

LEFT

Conor O'Shea, Associate ASLA.

HINTERLANDS URBANISM AND LANDSCAPE



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FOREGROUND / NOW



LEFT

Riparian corridors would protect development from prescribed prairie burns.

height of the program, we converted nearly 40 million acres of cropland into wildlife, grassland, and native prairie species," Walk says. "I appreciate O'Shea's vision, and it certainly is visionary to think about rewilding such a dominant piece of the landscape at an exponentially larger scale than is present."

Still, Walk says, there are substantial challenges in expanding the state's bison grazing range, not least of which is redesigning the roadway system to safely accommodate grazing bison. Doing so would require a vast network of prairie corridors. An even bigger obstacle, perhaps, are the local sensitivities at stake in large-scale land acquisition. "These are farming communities that have multigenerational ties to their communities," Walk says. "The land is a part of their heritage."

None of these hurdles, however, have slowed O'Shea down. Recently, he presented his plans to Michelle Boone, the commissioner of Chicago's Department of Cultural Affairs, and David Reifman, the commissioner of Chicago's Department of Planning and Development. His hope is to establish a foundation that would manage land acquisition and use the status of the bison to help raise funds. Within the next two years, he aims to host a symposium, bringing together landscape architects, farmers, soil scientists, biologists, climate scientists, ecologists, and representatives from the railroads to refine his framework into a formal design proposal. ●

part to a rise in online consumer purchasing sites such as Amazon. "The throughput of the combined ports of Elwood and Joliet is more than every single inland container port in the United States, and every coastal port except the Port of Los Angeles, Port of Long Beach, and Port of New York and New Jersey," O'Shea says.

Under the proposed scenario, the state's most profitable cropland would be preserved. The rest would be converted to prairie, slated for new development or freight activity, or expanded into the Bison Mosaic. The long-term strategy would use designed ecologies to prolong the usefulness of land. Market-driven incentives to acquire land for ecological tourism could be paid to farmers to

help offset losses due to decommissioned cropland, O'Shea says, adding that the spectacle of bison, shipping containers, and trains in close proximity to one another begs for a thoughtfully designed landscape—think viewing platforms, drone flyovers, and underground portals to view cross sections of bison wallows.

Jeff Walk, the director of science for the Nature Conservancy in Illinois, says the plan has a model in the U.S. Department of Agriculture's Conservation Reserve Program, a federal land rental agreement that provides payments to agricultural producers to take environmentally sensitive land out of production and steward with resource-conserving practices for at least 10 years. "At the